Validated By CRFValidator v 1.0.3

Application No: 10572827 Version No: 3.0

Input Set:

Output Set:

Started: 2011-01-05 18:44:47.052
Finished: 2011-01-05 18:44:51.111
Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 59 ms
Total Warnings: 19
Total Errors: 0
No. of SeqIDs Defined: 50
Actual SeqID Count: 50

Error code		Error Description
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W	402	Undefined organism found in <213> in SEQ ID (11)
W	402	Undefined organism found in <213> in SEQ ID (12)
W	402	Undefined organism found in <213> in SEQ ID (13)
W	402	Undefined organism found in <213> in SEQ ID (14)
W	213	Artificial or Unknown found in <213> in SEQ ID (46)
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SEQUENCE LISTING

<110> Feldmann, Kenneth
Pennell, Roger
Kwok, Shing
Dang, Van-Dinh
Zhang, Hongyu

<120> NUCLEOTIDE SEQUENCES AND POLYPEPTIDES ENCODED THEREBY USEFUL FOR INCREASING PLANT SIZE AND INCREASING THE NUMBER AND SIZE OF LEAVES

<130> 2750-1573PUS1

<140> 10572827
<141> 2011-01-05

<150> PCT/US03/25997
<151> 2003-08-18

<160> 50

<170> PatentIn version 3.0

<210> 1
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<213> Zea mays subsp. mays

<220>
<221> misc_feature
<222> (1)..(1453)
<223> ceres Seq. ID no. 12355477

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ctcacctgaa ttccgcccaa ataaattcgt cgctgccttg tgatccttgg ggtttccttg 180

gttcttgagt tgcgatcttc tgctggttcg tgtcccccaa tccgtaatca atccggcgtc 240

taggaaacca attgctgctc agttctctta tttgctcctc gccttccttc ctccagcctg 300

gttaaaatat cgaaagggga ttttttttta aaaatctgct catcgaggaa gcagggaaga 360

caagaattgt tgcatcggat aaaggtcggg tgaaaataca agcaaatcct gggaactcgc 420

gtccctttgc taggtggttc tttcctgata caaagaacac aatgggcgat gtgtccttga 480

acggacccat taaggctgct gagccaggtg ccggtggcat tgccaagggc aatcaagttc 540

tggacacgat gtccgccggg tggacagacg agagacacag gctgtatata agctctatgg 600

aggcctcttt cgtcgatcaa ctgtacaacc acgggagccg tccgcgcaac gcaaacggca 660

ccgccttcaa ggctctccgc agggagtacg tcgagtatga gaagaccgat gctcctgtgc 720

gaaggggggc taagtgctgc ggcgttcctg caaatccttg gatgcagcat ttcaggccac 780

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<212> DNA
<213> Zea mays subsp. mays

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ctgtatataa gctctatgga ggcctctttc gtcgatcaac tgtacaacca cgggagccgt 180

ccgcgcaacg caaacggcac cgccttcaag gctctccgca gggagtacgt cgagtatgag 240

aagaccgatg ctcctgtgcg aaggggggct aagtgctgcg gcgttcctgc aaatccttgg 300

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gattctgtgg gcgatcttga atctggcact gaggcaaacc ggaagagcct ctcagcgtct 420

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Gly Trp Thr Asp Glu Arg His Arg Leu Tyr Ile Ser Ser Met Glu Ala
        35                  40                  45

Ser Phe Val Asp Gln Leu Tyr Asn His Gly Ser Arg Pro Arg Asn Ala
    50                  55                  60

Asn Gly Thr Ala Phe Lys Ala Leu Arg Arg Glu Tyr Val Glu Tyr Glu
65                  70                  75                  80

Lys Thr Asp Ala Pro Val Arg Arg Gly Ala Lys Cys Cys Gly Val Pro
                85                  90                  95

Ala Asn Pro Trp Met Gln His Phe Arg Pro Arg Ser Asp Gly Gly Asn
            100                 105                 110

Asn Ala Arg Gly Asp Gly Leu Gly Asp Ser Val Gly Asp Leu Glu Ser
        115                 120                 125

Gly Thr Glu Ala Asn Arg Lys Ser Leu Ser Ala Ser His Gly Arg Glu
    130                 135                 140

Arg Asp Ala Cys Glu Gly Glu Pro Gln Leu Leu His Glu Ser Arg Glu
145                 150                 155                 160

Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu Ala Glu Thr Glu
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Ser Met Lys Ala Tyr Lys Lys Arg Arg Leu Ser Arg Thr Met Ile Asn
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<212> DNA
<213> Zea mays subsp. mays

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aaggctctcc gcagggagta cgtcgagtat gagaagaccg atgctcctgt gcgaaggggg 180

gctaagtgct gcggcgttcc tgcaaatcct tggatgcagc atttcaggcc acgtagtgat 240

ggcggtaata acgcgcgagg cgatgggctc ggggattctg tgggcgatct tgaatctggc 300

actgaggcaa accggaagag cctctcagcg tctcatggaa gggaacggga cgcttgtgag 360

ggagaacccc agcttctcca tgaaagtaga gaggtctctg atcaaaattt tgctgacgac 420

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<213> Zea mays subsp. mays

<220>
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<222> (1)..(163)
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20 25 30

Arg Asn Ala Asn Gly Thr Ala Phe Lys Ala Leu Arg Arg Glu Tyr Val
35 40 45

Glu Tyr Glu Lys Thr Asp Ala Pro Val Arg Arg Gly Ala Lys Cys Cys
50 55 60

Gly Val Pro Ala Asn Pro Trp Met Gln His Phe Arg Pro Arg Ser Asp
65 70 75 80

Gly Gly Asn Asn Ala Arg Gly Asp Gly Leu Gly Asp Ser Val Gly Asp
85 90 95

Leu Glu Ser Gly Thr Glu Ala Asn Arg Lys Ser Leu Ser Ala Ser His
100 105 110

Gly Arg Glu Arg Asp Ala Cys Glu Gly Glu Pro Gln Leu Leu His Glu
115 120 125

Ser Arg Glu Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu Ala
130 135 140

Glu Thr Glu Ser Met Lys Ala Tyr Lys Lys Arg Arg Leu Ser Arg Thr

145 150 155 160

Met Ile Asn

<210> 6
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<212> DNA
<213> Zea mays subsp. mays

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gtgcgaaggg gggctaagtg ctgcggcgtt cctgcaaatc cttggatgca gcatttcagg 180

ccacgtagtg atggcggtaa taacgcgcga ggcgatgggc tcggggattc tgtgggcgat 240

cttgaatctg gcactgaggc aaaccggaag agcctctcag cgtctcatgg aagggaacgg 300

gacgcttgtg agggagaacc ccagcttctc catgaaagta gagaggtctc tgatcaaaat 360

tttgctgacg acgaggctga agctgaaaca gaatcaatga aagcatacaa gaaaaggaga 420

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<213> Zea mays subsp. mays

<220>
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<222> (1)..(147)
<223> ceres Seq. ID no. 12355480

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20 25 30

Glu Tyr Glu Lys Thr Asp Ala Pro Val Arg Arg Gly Ala Lys Cys Cys
35 40 45

Gly Val Pro Ala Asn Pro Trp Met Gln His Phe Arg Pro Arg Ser Asp
50 55 60

Gly Gly Asn Asn Ala Arg Gly Asp Gly Leu Gly Asp Ser Val Gly Asp
65 70 75 80

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Leu Glu Ser Gly Thr Glu Ala Asn Arg Lys Ser Leu Ser Ala Ser His
                85                  90                  95

Gly Arg Glu Arg Asp Ala Cys Glu Gly Glu Pro Gln Leu Leu His Glu
            100                 105                 110

Ser Arg Glu Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu Ala
        115                 120                 125

Glu Thr Glu Ser Met Lys Ala Tyr Lys Lys Arg Arg Leu Ser Arg Thr
    130                 135                 140

Met Ile Asn
145
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<212> DNA
<213> Zea mays subsp. mays

<220>
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<222> (1)..(1494)
<223> ceres Seq. ID no. 12410516

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agggggcttg cttcatctgc tgtccgatcg tggtttggtt tctcggggct ggcgcggtca  180

agagcgcacc tgaattccac cgaaatccgc cacggtagtt cttgcctagg tgtgtcgttg  240

gtcgttgcct tgtgaccctt gcggattttc ttgtttcttt ttgagttgcg atctttgcag  300

gttagtctcc cccccaatcc gtaatcatcc ggcgtctagg aaactgcagt ccagttttct  360

tatttgttcg tctcgtgcct tctccccatc ctggttagaa agaatatcgg aaggggggatt  420

ttttttttg cctgttcgta gaggaagcag tgaagacata attgttgcat ctgataaagc  480

tcgggcgaaa tacacgcaaa tccttggaat tttgcatccc tttgctggct cttttctgat  540

tcagagaacc caatggggga tgtgtccttg aatcgacccg ttaaggccga gccaactgcc  600

ggtggcattg ccaagggaaa ccgagttctg gacacgatgt ccgccgggtg gacggacgag  660

agacacatgc tgtatataag ctccatggag gcttcttttg tcgatcagct atacaaccat  720

ggaaaccatc cgcacgacgc aaatggcgct ggcttcaagg ttctccgcag gggggtgtgg  780

gagtacatcg agtatgagaa gaccagtgcc cctgtgcgaa gtggggctaa atgctgcgtc  840
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tcaatgaaag catgcaagaa aaggagacta agcagggctt tgcactccgg tgctgaatga 1140

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<213> Zea mays subsp. mays

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tatataagct ccatggaggc ttcttttgtc gatcagctat acaaccatgg aaaccatccg 180

cacgacgcaa atggcgctgg cttcaaggtt ctccgcaggg gggtgtggga gtacatcgag 240

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gcctcagtgg gcgaccatga gtcgggtact caggcaagcc gcaagagccc ttcagtgtct 420

catggaaggg aacggggagc ttgtaaggga gaaccccaga ttctacatga aagtacagag 480

gtctctgatc aaaattttgc tgacgatgag gctgaagctg aaacagaatc aatgaaagca 540

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<213> Zea mays subsp. mays

<220>
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<222> (1)..(195)
<223> ceres Seq. ID no. 12410517

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20 25 30

Trp Thr Asp Glu Arg His Met Leu Tyr Ile Ser Ser Met Glu Ala Ser
35 40 45

Phe Val Asp Gln Leu Tyr Asn His Gly Asn His Pro His Asp Ala Asn
50 55 60

Gly Ala Gly Phe Lys Val Leu Arg Arg Gly Val Trp Glu Tyr Ile Glu
65 70 75 80

Tyr Glu Lys Thr Ser Ala Pro Val Arg Ser Gly Ala Lys Cys Cys Val
85 90 95

Pro Ala Asn Pro Trp Ile Arg His Phe Arg Pro Arg Asp Cys Gly Ser
100 105 110

Asn Ala Gln Ser Asp Ala Val Glu Ala Ser Val Gly Asp His Glu Ser
115 120 125

Gly Thr Gln Ala Ser Arg Lys Ser Pro Ser Val Ser His Gly Arg Glu
130 135 140

Arg Gly Ala Cys Lys Gly Glu Pro Gln Ile Leu His Glu Ser Thr Glu
145 150 155 160

Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu Ala Glu Thr Glu
165 170 175

Ser Met Lys Ala Cys Lys Lys Arg Arg Leu Ser Arg Ala Leu His Ser
180 185 190

Gly Ala Glu
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<212> DNA
<213> Zea mays subsp. mays

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aaggttctcc gcaggggggt gtgggagtac atcgagtatg agaagaccag tgcccctgtg 180

cgaagtgggg ctaaatgctg cgtccctgca aatccttgga tccggcattt caggccacgt 240

gactgcggta gtaacgcaca gagtgacgcg gtcgaggcct cagtgggcga ccatgagtcg 300

ggtactcagg caagccgcaa gagcccttca gtgtctcatg gaagggaacg gggagcttgt 360

aagggagaac cccagattct acatgaaagt acagaggtct ctgatcaaaa ttttgctgac 420

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<213> Zea mays subsp. mays

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20 25 30

His Asp Ala Asn Gly Ala Gly Phe Lys Val Leu Arg Arg Gly Val Trp
35 40 45

Glu Tyr Ile Glu Tyr Glu Lys Thr Ser Ala Pro Val Arg Ser Gly Ala
50 55 60

Lys Cys Cys Val Pro Ala Asn Pro Trp Ile Arg His Phe Arg Pro Arg
65 70 75 80

Asp Cys Gly Ser Asn Ala Gln Ser Asp Ala Val Glu Ala Ser Val Gly
85 90 95

Asp His Glu Ser Gly Thr Gln Ala Ser Arg Lys Ser Pro Ser Val Ser
100 105 110

His Gly Arg Glu Arg Gly Ala Cys Lys Gly Glu Pro Gln Ile Leu His
115 120 125

Glu Ser Thr Glu Val Ser Asp Gln Asn Phe Ala Asp Asp Glu Ala Glu
130 135 140

Ala Glu Thr Glu Ser Met Lys Ala Cys Lys Lys Arg Arg Leu Ser Arg

145 150 155 160

Ala Leu His Ser Gly Ala Glu
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<210> 13
<211> 471
<212> DNA
<213> Zea mays subsp. mays

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atcgagtatg agaagaccag tgcccctgtg cgaagtgggg ctaaatgctg cgtccctgca 180

aatccttgga tccggcattt caggccacgt gactgcggta gtaacgcaca gagtgacgcg 240

gtcgaggcct cagtgggcga ccatgagtcg ggtactcagg caagccgcaa gagcccttca 300

gtgtctcatg gaagggaacg gggagcttgt aagggagaac cccagattct acatgaaagt 360

acagaggtct ctgatcaaaa ttttgctgac gatgaggctg aagctgaaac agaatcaatg 420

aaagcatgca agaaaaggag actaagcagg gctttgcact ccggtgctga a 471

<210> 14
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<212> PRT
<213> Zea mays subsp. mays

<220>
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<222> (1)..(157)
<223> ceres Seq. ID no. 12410519

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Asn His Gly Asn His Pro His Asp Ala Asn Gly Ala Gly Phe Lys Val
20 25 30

Leu Arg Arg Gly Val Trp Glu Tyr Ile Glu Tyr Glu Lys Thr Ser Ala
35 40 45

Pro Val Arg Ser Gly Ala Lys Cys Cys Val Pro Ala Asn Pro Trp Ile
50 55 60

Arg His Phe Arg Pro Arg Asp Cys Gly Ser Asn Ala Gln Ser Asp Ala
65